

RECEIVED

AUG 201995

FCC MAIL ROOM

W.F. Caton, Acting Secretary Federal Communications Commission 1919 M Street, N.W. - Room 222 Washington, D.C. 20554

August 20, 1993

Re: Motion to Accept late Filed/Comments and Comments of InterDigital in RM-8159.

Dear Mr. Caton:

Transmitted herewith are an original and four copies of of a Motion to Accept Late Filed Comments and Comments of InterDigital Communications Corp. in RM-8159.

If you have any questions with regard to this matter, please do not hesitate to contact me. I can be reached at 215/278-7889.

Sincerely,

Respectfully\_submitted,

David L. Smith Vice President

InterDigital Communications Corp. 2200 Renaissance Blvd., Suite 105 King of Prussia, PA 19406

August 20, 1993

No. of Copies rects
Ust A B C D E



RECEIVED

AUG 201995

FCC MAIL ROOM

## Before the **FEDERAL COMMUNICATIONS COMMISSION** Washington, D.C. 20554

In the Matter of

Petition to Authorise Co-Primary Sharing of the 450 MHz Air-Ground Radiotelephone Service with BPTRS RM-8159

MOTION TO ACCEPT LATE FILED COMMENTS OF INTERDIGITAL COMMUNICATIONS CORPORATION

InterDigital Communications Corporation ("InterDigital"), pursuant to Section 1.46 of the Commission's Rules, respectfully requests that its attached comments in the above-captioned matter be made a part of the record.

InterDigital is providing specific comments on the singular issue of the need for a new subpart in the Part 22 rules to accommodate the special needs of Basic Exchange Telecommunications Radio Service (BETRS).

These comments are a response to Commission staff concerns that the issue of a new subpart for BETRS was not specifically identified in sufficient and specific detail in the comments received in response to the petition for rulemaking.

Respectfulły submittød,

David L. Smith Vice President

InterDigital Communications Corp. 2200 Renaissance Blvd., Suite 105 King of Prussia, PA 19406

August 20, 1993

# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554



| In the Matter of                            |     |  | ) |         |
|---------------------------------------------|-----|--|---|---------|
| Petition to Authorize                       |     |  | ) | RM-8159 |
| Co-Primary Sharing of<br>450 MHz Air-Ground | the |  | ) |         |
| Radiotelephone Service<br>with BETRS        | 3   |  | Ì |         |

COMMENTS OF INTERDIGITAL COMMUNICATIONS CORP.

#### I. INTRODUCTION

InterDigital Communications Corporation ("InterDigital") respectfully submits these additional comments in the above captioned proceeding. InterDigital is a wireless technology manufacturer that has developed an advanced spectrum efficient digital radio system which operates under the current BETRS rules to provide wireless loops between telephone central offices and customer premises. As such, InterDigital is concerned that the current proceeding explore not only additional spectrum for BETRS but also effective rules to enable the spectrum to be used efficiently to provide an alternative method of delivering basic telephone service in rural areas.

On October 15, 1992, International Hobils Machines Corp. (IMM) acquired SCS Mabilecom/Telecom, Inc., a world leader in Code Division Multiple Access (CDMA) technology. SCS was one of the early planeers in testing and proving the merit of Broadband CDMA (B-CDMA) technology in the PCS microcell environment. The merger of the two companies and their technology staffs has resulted in the formation of a new company: InterDigital Communications Corporation.

#### II DISCUSSION

In the original round of comments most commentors focused on the need for more spectrum for BETRS. However, it would be a hollow victory indeed if spectrum relief was granted and the current rules which apply to BETRS were left unchanged. Accordingly, the following comments are submitted to substantiate the need to establish a new subpart in the Part 22 rules to embody specific rules which apply uniquely to BETRS.

For example, current and proposed rules would limit the availability of channels to BETRS licensees. Proposals, such as the new Section 22.569, to limit channels to two (2) per application should not apply to BETRS. BETRS systems are designed to meet a telephone industry grade of service of P.Ol. This level of service is often dictated by State Public Service Commissions (PSCs) and certainly by the expectation of customers that use radio to replace wire for the provision of basic telephone service.

This point was made in InterDigital's original comments in this proceeding. "...Proposals by the MSD to limit initial channel availability for mobile licenses would effectively eliminate BETRS as an option for telephone company service." The proposal in new Section 22.569 perfectly illustrates how a rule which makes sense for a mobile service could adversely effect a fixed service.

<sup>2</sup> Comments of Interdigital at 6.

Telephone companies could not use BETRS under the proposed channel allocation scheme (Section 22.569) because PSCs would not allow telephone companies to provide an inferior quality of telephone service to rural customers. Most BETRS installations provide telephone service to a small percentage of the telephone exchange's customer base. If BETRS was restricted (by Commission rules) to the grade of service proposed, the result would be different levels of service (wire and radio) within the same telephone exchange.

For these reasons, Commission action to force a mobile grade of service on a fixed telephone service would effectively eliminate BETRS as a viable alternative for telephone company use to provide high-quality local telephone service in rural areas.

In addition to this obvious need to treat BETRS differently from conventional mobile service, there are other attributes of BETRS as a fixed service that should be recognized in a separate subpart of the rules. Antenna polarization, number of transmitters and channel spacing are but a few examples of the unique characteristics of a fixed service which uses fixed high gain antennas.

In fact, InterDigital documented seven specific rule parts in the Part 22 rules which require changes to accommodate the unique aspects of BETRS.<sup>3</sup>

<sup>3</sup> Comments of InterDigital at 6-8, in Notice of Proposed Rulemaking in CC Docket No. 92-115, 7 FCC Rcd. 3658, 3672 (1992), February 4, 1993.

These rule changes could easily be accommodated under a new subpart of the Part 22 rules dealing specifically with BETRS.

## II CONCLUSION:

The Commission should separate BETRS from the rules that govern conventional mobile service, and establish a separate subpart of the Part 22 rules. The new subpart should contain specific rules which reflect the unique characteristics of BETRS as a fixed service providing basic telephone service.

Respectfully submitted,

David L. Smith Vice President

InterDigital Communications Corp. 2200 Renaissance Blvd., Suite 105 King of Prussia, PA 19406

August 20, 1993

## CERTIFICATE OF SERVICE

I, Susan P. Sutton, hereby certify that a copy of the foregoing Comments of InterDigital Communications Corp. was mailed first-class United States mail, postage prepaid, this 20th day of August, 1993 to the parties listed on the attached service list.

Susan P. 90tton

Thomas Gutierrez, Esq.
George L. Lyon, Jr., Esq.
J. Justin McClure, Esq.
Lukas, McGowan, Nace & Gutierrez, Chartered
1819 H Street, N.W., 7th Floor
Washington, DC 20006
(Counsel for Mobile Telecommunications
Technologies Corp.)

John A. Magyar, Telephone Manager City of Ketchikan, Alaska d/b/a Ketchikan Public Utilities 2930 Tongass Ketchikan, AK 99901-6492

James R. Carlson Carlson Communications, Inc. 655 Redwood Drive Garberville, CA 95542

Pat Myers, Acting Telecommun. Director Fairbanks Municipal Utilities System Telephone Company P.O. Box 72215 Fairbanks, AK 99707-2215

Jay Wilson Preston, President Ronan Telephone Company 312 Main Street, SW Ronan, MT 59864-2707

Jim D. Reppond, President Century Telephone of Arkansas, Inc. 100 Century Park Drive Monroe, Louisiana 71203 Robert H. Edgar, President California - Oregon Telephone Co. P. O. Box 847 Dorris, CA 96023

Donald W. Gruneisen, President Nicholville Telephone Company, Inc. P.O. Box 122 Nicholville, NY 12965-0122

E.L. Silkwood, President The Ponderosa Telephone Co. P.O. Box 21 O'Neals, CA 93645-0021

John O'Neal National Rural Telecom Association 1455 Pennsylvania Ave., N.W. Suite 1200 Washington, DC 20004

Lisa Zaina
Organization for the Protection and
Advancement of Small Telephone Companies
2000 K Street, N.W., Ste. 205
Washington, DC 20037

David Cosson National Telephone Cooperative Association 2626 Pennsylvania Ave., N.W. Washington, DC 20036

James Huff
Rural Electrification Administration
14th & Independence Ave., S.W.
Room 4051 - South
Washington, DC 20250

Martin T. McCue Vice President and General Counsel U.S. Telephone Association 900 19th St., NW, Ste. 800 Washington, DC 20006-3114